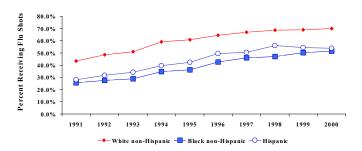
## Theme 7: Outcomes, Quality and Performance

The CMS research, demonstration, and evaluation agenda involves the development and testing of improved information resources to enable consumers to choose among health plans and providers based on their relative value and quality. One part of this agenda seeks to better understand how choices are made. The aim is to develop better tools for measuring health care outcomes and quality, as well as the performance of health plans and providers. Projects in this area include: development and assessment of performance measures, developing and testing approaches for selective contracting with providers (institutions and Medicare contracting health plans) based on quality, implementing and evaluating the Medicare lifestyle modification program demonstration, and developing new quality measures, especially for rehabilitation hospitals.

Utilization of flu shots was higher for white non-Hispanic beneficiaries than other racial groups, but rates for all groups increased over the decade.



Source: CMS, Office of Research, Development, and Information: Data from Medicare Current Beneficiary Survey (MCBS) 1991-2000 Access to Care Files.

98-257 Development and Validation of Measures and Indicators of the Quality Appropriateness of Services Rendered in Post-Acute and LTC Settings

**Project Officer:** Yael Harris

**Period:** September 1998-September 2003

Awardee: Abt Associates Funding: \$5,247,965

**Description:** This project is developing and validating a comprehensive set of performance measures and indicators of quality for institutional post-acute and long-term care settings. The post-acute settings include skilled nursing facility short-stay units, inpatient rehabilitation facilities (including hospital-based rehabilitation units), and long-term care hospitals. Performance measures will be standardized across provider types, in order to allow necessary

comparisons to be made about outcomes of care. Performance measures may also be used within CMS's regulatory quality monitoring programs to inform quality improvement activities, to provide information to consumers, and to provide information to payers of health care for use in evaluating the quality and care delivery. The use of quality measures and indicators, will allow CMS to determine objectively the value of the care it purchases by providing a valid measurement of the care furnished by Medicare-participating providers.

**Status:** The project has reviewed the existing literature and identified quality indicators (QI) for further testing and analysis. Twenty-two QIs were recommended for general use by CMS in determining the quality of nursing home care. Three of these QIs were posted on the Nursing Home Compare Web site in February 2001 as part of CMS's outreach effort to allow beneficiaries and the public to make informed decisions about their care. The project team also developed four sets of draft quality indicators in the areas of chronic care, postacute care, medication use, and facility "descriptors." These QIs were posted from October-December of 2000. Based on the comments and feedback received, a final set of 9 new long-term care QIs and 8 post-acute QIs were developed. The team is currently involved in the validation of these measures as well as preparing eleven of these measures (9 long term care indicators and 4 post acute indicators) for public reporting in 6 pilot States beginning in April 2002. A set of measures is expected to be posted on www.Medicare.gov for all nursing homes in the US beginning October 2002.



#### 99-066 Improving Quality in Long-Term Care

**Project Officer:** Sydney Galloway **Period:** April 1999-March 2001

Awardee: National Academy of Sciences,

Institute of Medicine

**Funding:** \$50,000

Description: This project supported a National Academy of Sciences/Institute of Medicine (IOM) committee recommendation to draft an additional report related to payment issues and research directions. CMS initially funded a portion of an ongoing IOM project, and sponsored an additional meeting of the project committee to further explore and deliberate on its findings and recommendations related to the definition and enforcement of regulatory standards, work-force problems, organizational capacity for quality improvement, quality measurement, and information strategies in long-term care situations.

**Status:** The final report has been issued by the Academy and is available directly from them. ■

### 01-118 Improved Protocols for Home Health Agency Assessment in the Survey Process

**Project Officer:** Tracey Mummert

**Period:** September 2001-June 2004 **Awardee:** Center for Health Policy

Research, University of Colorado

**Funding:** \$797,000

**Description:** The purpose of this project is to assess the existing home health agency (HHA) survey process and make recommendations for improvements. Improvements include patient-focused, outcomeoriented, data-driven approaches that are effective and efficient in assessing, monitoring and evaluating the quality of care delivered by an HHA. The project will also evaluate the effectiveness of current survey forms, develop new survey forms, as applicable, and make recommendations for prioritizing onsite survey time.

The assessment will focus on the Outcome and Assessment Information Set, designed for the purpose of enabling the rigorous and systematic measurement of patient home health care outcomes, with appropriate adjustment for patient risk factors affecting those outcomes; and the Online Survey Certification and Reporting System.

**Status:** The period of performance was extended to June 2004. Several States volunteered to participate in the testing of the new survey protocols. ■

# HOME HEALTH OUTCOME BASED QUALITY IMPROVEMENT SYSTEM PILOT DEMONSTRATION - HH OBQI SYSTEM

The goal of this pilot project is to explore the feasibility of establishing a national home health outcome-based quality improvement (OBQI) system. Quality Improvement (formerly Peer Review) Organizations (QIO) worked with home health agencies (HHA) to implement quality improvement programs. The QIO support HHA compliance with Medicare Conditions of Participation, assist the State agencies in related monitoring and enforcement efforts, assist CMS and Regional Home Health Intermediaries (in home health program integrity assessment, and prepare summary information about the Nation's home health care. Major objectives involve developing training materials for the pilot QIO and HHA on the Outcome and Assessment Information Set, providing regular assessments of local, regional and national home health services, and creating a clearinghouse to distribute information about best practices in home health

# 00-012 Home Health Outcome Based Quality Improvement System Pilot Demonstration - HH OBQI System

**Project Officer:** Armen Thoumaian

Period: December 1999-March 2002

Awardee: Delmarva Foundation for Medical

Care

**Funding:** \$1,365,517



00-013 Home Health Outcome Based Quality Improvement System Pilot Demonstration - HH OBQI Pilot PRO - Maryland

**Project Officer:** Armen Thoumaian

Period: December 1999-March 2002

Awardee: Delmarva Foundation for Medical

Care

**Funding:** \$178,000

00-014 Home Health Outcome Based Quality Improvement System Pilot Demonstration - HH OBQI Pilot PRO - New York

**Project Officer:** Armen Thoumaian

**Period:** December 1999-March 2002 **Awardee:** Island Peer Review Organization

**Funding:** \$690,000

00-015 Home Health Outcome Based Quality Improvement System Pilot Demonstration - HH OBQI Pilot PRO - Michigan

**Project Officer:** Armen Thoumaian

**Period:** December 1999-March 2002

Awardee: Michigan Peer Review

Organization

**Funding:** \$652,000

00-016 Home Health Outcome Based Quality Improvement System Pilot Demonstration - HH OBQI Pilot PRO - Rhode Island

**Project Officer:** Armen Thoumaian

Period: December 1999-March 2002

Awardee: Rhode Island Quality Partners

**Funding:** \$450,000

00-017 Home Health Outcome Based Quality Improvement System Pilot Demonstration - HH OBQI Pilot PRO - Virginia

**Project Officer:** Armen Thoumaian

Period: December 1999-March 2002

Awardee: Virginia Health Quality Center

**Funding:** \$474,000

94-074 Design and Implementation of Medicare Home Health Quality Assurance Demonstration

**Project Officer:** Armen Thoumaian

**Period:** September 1994-December 2003

**Awardee:** Center for Health Policy

Research, University of Colorado

**Funding:** \$5,185,699

Description: The Medicare Home Health Quality Assurance Demonstration developed and tested an approach to develop outcome-oriented quality assurance techniques and promote continuous quality improvement in home health agencies (HHA). Risk adjusted reports are produced for 41 specific patient quality outcomes for all adult patients. These reports are provided to the participating HHAs and are used to determine which outcomes need improvement, thereby providing a focus for agency staff to target problematic care. The demonstration resulted in significant improvement in 80 percent of agency specific outcome targets, with a yearly improvement in re-hospitalization rates across all agencies.

Status: Fifty-four agencies in 26 States were phased into the demonstration beginning in January 1996. In January 1997, the demonstration agencies received their first outcome reports and developed plans of actions to improve care for two patient outcomes during 1997. Agencies received their second annual reports in May 1998, which contained baseline comparisons from 1997, and received their third and final reports in May 1999. A final report has been completed and is available. ■

99-067 Cost/Payment Issues Related to Quality Improvement and Error Reduction in Health Care

Project Officer: Sydney Galloway

Period: August 1999-March 2001

Awardee: National Academy of Sciences,

Institute of Medicine

**Funding:** \$50,000



**Description:** CMS provided funding for a portion of an ongoing project in the National Academy of Sciences/Institute of Medicine (IOM)—the Quality of Health Care in America (QHCA). The overall objective of the QHCA project is to develop a strategy that will result in improved quality and patient safety. The funding sponsored a workshop, commissioned several expert papers and produced a white paper providing a better understanding of the effects of financial incentives—external and internal to health care organizations—on quality improvement in health care, and developed a decision framework to help policy development related to implementation of quality and patient safety improvements. QHCA includes individuals with expertise in health care purchasing, consumer issues, insurance and administration, provision of health care services, health informatics and quality oversight and regulation.

**Status:** The QHCA project produced a series of reports on the following topics: 1) Patient safety and medical errors; 2) a communications strategy for raising the awareness of key stakeholders regarding quality of care concerns; 3) information technology and quality improvement; and 4) characteristics of the 21st century health care system. ■

## 01-211 Integrated Chronic Disease Quality Performance Measurement at the Physician Level

**Project Officer:** Barbara Fleming

**Period:** September 2001-March 2003

**Awardee:** C.N.A. Corporation

**Funding:** \$499,999

**Description:** This project explores issues important to physician, such as-the level quality of care scoring in chronic disease and prevention. The project will help to define quality of care for chronic disease using existing performance measures and will use existing data to begin to model these concepts. The Ambulatory Care Quality Improvement Program data will be the primary vehicle for the initial work. The second phase applies knowledge gained in diabetes care quality measurement to develop a framework and model for composite quality of care scoring for chronic disease.

**Status:** This project is in the startup phase. ■

### 01-170 Development of Quality Indicators for Inpatient Rehabilitation Facilities

**Project Officer:** Yael Harris

**Period:** September 2001-September 2003

Awardee: Research Triangle Institute

**Funding:** \$1,481,000

**Description:** This project will develop and define measures to monitor the quality of care and services provided to Medicare beneficiaries receiving care in inpatient rehabilitation facilities (IRFs). It will develop a set of measures for use by States. A prospective payment system IRF more accurately reflects actual costs required to provide rehabilitation care in a hospital setting. In order to establish the new payment system, a data collection instrument has been designed to collect information necessary to calculate and make appropriate payments. The instrument, the Inpatient Rehabilitation Facility-Patient Assessment Instrument (IRF-PAI) follows a structure from the extant instrument but contains a number of additional items necessary to calculate payment codes and ensure the delivery of high quality care to Medicare beneficiaries. The key difference is that it will estimate dischargebased total costs while the extant payment system is based on time spent by providers furnishing services.

**Status:** This project is in its early development

stages. ■

# 99-059 Development and Testing of an Outcome Assessment Information Set (OASIS) Accuracy Verification Protocol

Project Officer: Heidi Gelzer

**Period:** September 1999-July 2001 **Awardee:** Center for Health Policy

Research, University of Colorado

**Funding:** \$1,181,159

**Description:** This project will develop cost-effective methods for verifying and ultimately improving the accuracy of the Outcomes and Assessment Information Set (OASIS) data submitted by home health agencies (HHAs) to State agencies and CMS. A major task



under this project is to assess the current system for electronic editing and rejection of OASIS records that have fatal errors, as well as analysis of patterns within OASIS records transmitted by HHAs to the State, and OASIS records maintained at CMS in a national database. The project will provide recommendations concerning what cost-effective enhancements are needed to those components of the electronic OASIS data base system that affect data accuracy, including the electronic edits, testing of additional enhancements, and setting of error tolerances for the system. Another major task of this project is the development, testing, and analysis of a set of prototype accuracy protocols with differing levels of intensity of review and, thus, costs. It is expected that these protocols will include both electronic data analysis (offsite) and onsite verification components.

**Status:** The project has completed the development and pilot testing of clinical audit protocols. It was preparing for field testing in January. In the edit protocols segment of the project, work has been completed on two of the four protocols needed. ■

### 01-221 Northern New England Vascular Surgery Quality Improvement Initiative

Project Officer: Beth Kosiak

**Period:** September 2001-September 2003 **Awardee:** Trustees of Dartmouth College,

Office of Grants and Contracts

**Funding:** \$262,000

**Description:** The goal of this project is to improve the care of patients undergoing vascular surgery in Maine, New Hampshire, and Vermont. A data registry will be used to collect detailed clinical information on patient care. A risk-adjustment model will be developed to analyze the outcomes of care. Outcomes reporting and benchmarking visits will be used to improve outcomes and reduce variations in care delivery.

**Status:** This project is in the startup phase. ■

#### MEDICARE LIFESTYLE MODIFICATION PROGRAM DEMONSTRATION

The Medicare Lifestyle Modification Program
Demonstration is a four year payment project
implemented to evaluate the feasibility and cost
effectiveness of cardiovascular lifestyle modification.
The participating sites may enroll up to 1800 Medicare
Part B eligible beneficiaries who meet the clinical
enrollment criteria and voluntarily elect to participate
in the demonstration. The demonstration sites will
receive 80 percent of a total negotiated fixed payment
amount for a 12-month program. Sites may collect (or
waive) the remaining 20 percent from the beneficiary
as an enrollment fee. Claims processing and payment is
managed by CMS.

#### 01-235 Medicare Lifestyle Modification Program Demonstration - Preventive Medicine Research Institute - Bloomington, IN

Project Officer: Armen Thoumaian Period: January 2001-

**Awardee:** BroMenn Healthcare,

Department of Cardiology

Funding: \$0

**Description:** The demonstration is being implemented at participating sites licensed by the Dr. Dean Ornish Program for Reversing Heart Disease ®.

Status: In November 2000, the enrollment criteria were amended to include patients with less severe cardiovascular disease. In accordance with the Consolidated Appropriations Act of 2001, steps have been completed to incorporate a second lifestyle program operated by the Mind/Body Medical Institute (M/BMI) into the overall demonstration. The same law provided a mandate for a 4-year treatment period beginning November 2000. Since the beginning of the demonstration, a total of 23 patients have been enrolled in this demonstration and in the one operated by Dr. Ornish. There are 11 total patients now enrolled and receiving the year long treatment. Currently, there are 5 LA/PMRI sites. Efforts are underway to incorporate 10 to 15 new sites within the next few months across both program models.



## 00-176 Medicare Lifestyle Modification Program Demonstration - Preventive Medicine Research Institute - Omaha

Project Officer: Armen Thoumaian

Period: July 2000-

Awardee: Alegent Health, Immanuel

Medical Center

Funding: \$0

**Description:** The demonstration is being implemented at participating sites licensed by the Dr. Dean Ornish Program for Reversing Heart Disease ®.

Status: In November 2000, the enrollment criteria were amended to include patients with less severe cardiovascular disease. In accordance with, the Consolidated Appropriations Act of 2001, steps have been completed to incorporate a second lifestyle program operated by the Mind/Body Medical Institute (M/BMI) into the overall demonstration. The same law provided a mandate for a 4-year treatment period beginning November 2000. Since the beginning of the demonstration, a total of 23 patients have been enrolled in this demonstration and in the one operated by Dr. Ornish. There are 11 total patients now enrolled and receiving the year long treatment. Currently, there are 5 LA/PMRI sites. Efforts are underway to incorporate 10 to 15 new sites within the next few months across both program models.

## 01-236 Medicare Lifestyle Modification Program Demonstration - Preventive Medicine Research Institute - Kearney, NE

**Project Officer:** Armen Thoumaian

Period: June 2001-

Awardee: Good Samaritan Hospital, Health

Lifestyle Program

Funding: \$0

**Description:** The demonstration is being implemented at participating sites licensed by the Dr. Dean Ornish Program for Reversing Heart Disease ®.

Status: In November 2000, the enrollment criteria were amended to include patients with less severe cardiovascular disease. In accordance with the Consolidated Appropriations Act of 2001, steps have been completed to incorporate a second lifestyle program operated by the Mind/Body Medical Institute (M/BMI) into the overall demonstration. The same law provided a mandate for a 4-year treatment period beginning November 2000. Since the beginning of the demonstration, a total of 23 patients have been enrolled in this demonstration and in the one operated by Dr. Ornish. There are 11 total patients now enrolled and receiving the year long treatment. Currently, there are 5 LA/PMRI sites. Efforts are underway to incorporate 10 to 15 new sites within the next few months across both program models.

#### 00-177 Medicare Lifestyle Modification Program Demonstration - Preventive Medicine Research Institute - Pittsburgh

**Project Officer:** Armen Thoumaian

Period: July 2000-

Awardee: Highmark Blue Cross/Blue Shield

Funding: \$0

**Description:** The demonstration is being implemented at participating sites licensed by the Dr. Dean Ornish Program for Reversing Heart Disease ®.

Status: In November 2000, the enrollment criteria were amended to include patients with less severe cardiovascular disease. In accordance with the Consolidated Appropriations Act of 2001, steps have been completed to incorporate a second lifestyle program operated by the Mind/Body Medical Institute (M/BMI) into the overall demonstration. The same law provided a mandate for a 4-year treatment period beginning November 2000. Since the beginning of the demonstration, a total of 23 patients have been enrolled in this demonstration and in the one operated by Dr. Ornish. There are 11 total patients now enrolled and receiving the year- long treatment. Currently, there are 5 LA/PMRI sites. Efforts are underway to incorporate 10 to 15 new sites within the next few months across both program models.



00-178 Medicare Lifestyle Modification Program Demonstration - Preventive Medicine Research Institute - Rockford, IL

Project Officer: Armen Thoumaian

Period: May 2000-

Awardee: Swedish American Center for

Complementary Medicine

Funding: \$0

**Description:** The demonstration is being implemented at participating sites licensed by the Dr. Dean Ornish Program for Reversing Heart Disease ®.

Status: In November 2000, the enrollment criteria were amended to include patients with less severe cardiovascular disease. In accordance with the Consolidated Appropriations Act of 2001, steps have been completed to incorporate a second lifestyle program operated by the Mind/Body Medical Institute into the overall demonstration. The same law provided a mandate for a 4 -year treatment period beginning November 2000. Since the beginning of the demonstration, a total of 23 patients have been enrolled in this demonstration and in the one operated by Dr. Ornish. There are 11 total patients now enrolled and receiving the year- long treatment. Currently, there are 5 LA/PMRI sites. Efforts are underway to incorporate 10 to 15 new sites within the next few months across both program models.

02-020 Medicare Lifestyle Modification Program Demonstration - Mind/Body Medical Institute - Nashville

**Project Officer:** Armen Thoumaian

**Period:** December 2001-November 2004 **Awardee:** Baptist Hospital System, Cardiac

Wellness Program

Funding: \$0

**Description:** The demonstration is being implemented at participating facilities licensed to provide the Cardiac Wellness Expanded Program of Dr. Herbert Benson and the Mind Body Medical Institute.

**Status:** In November 28, 2000, the enrollment criteria were amended to include patients with less severe cardiovascular disease. In accordance with the

Consolidated Appropriations Act of 2001, steps have been completed to incorporate this lifestyle program of the Mind/Body Medical Institute) into the overall demonstration. The same law provided a mandate for a 4-year treatment period beginning November 2000.

01-237 Medicare Lifestyle Modification Program Demonstration - Mind/Body Medical Institute -Boston

**Project Officer:** Armen Thoumaian

Period: June 2001-November 2004

Awardee: Beth Israel Deaconess Medical

Center

Funding: \$0

**Description:** The demonstration is being implemented at participating facilities licensed to provide the Cardiac Wellness Expanded Program of Dr. Herbert Benson and the Mind Body Medical Institute.

Status: In November 2000, the enrollment criteria were amended to include patients with less severe cardiovascular disease. In accordance with the Consolidated Appropriations Act of 2001, steps have been completed to incorporate this lifestyle program of the Mind/Body Medical Institute into the overall demonstration. The same law provided a mandate for a 4 -year treatment period beginning November 2000. ■

01-238 Medicare Lifestyle Modification Program Demonstration - Mind/Body Medical Institute - Warwick, RI

**Project Officer:** Armen Thoumaian

Period: September 2001-November 2004

Awardee: Care New England Wellness

Center

Funding: \$0

**Description:** The demonstration is being implemented at participating facilities licensed to provide the Cardiac Wellness Expanded Program of Dr. Herbert Benson and the Mind Body Medical Institute.

**Status:** In November 2000, the enrollment criteria were amended to include patients with less severe cardiovascular disease. In accordance with, the Consolidated Appropriations Act of 2001, steps have



been completed to incorporate this lifestyle program of the Mind/Body Medical Institute into the overall demonstration. The same law provided a mandate for a 4 -year treatment period beginning November 2000. ■

02-021 Medicare Lifestyle Modification Program Demonstration - Mind/Body Medical Institute - Houston

Project Officer: Armen Thoumaian

Period: November 2001-November 2004

Awardee: Memorial Hermann Southwest

Hospital

Funding: \$0

**Description:** The demonstration is being implemented at participating facilities licensed to provide the Cardiac Wellness Expanded Program of Dr. Herbert Benson and the Mind Body Medical Institute.

Status: In November 2000, the enrollment criteria were amended to include patients with less severe cardiovascular disease. In accordance with, the Consolidated Appropriations Act of 2001, steps have been completed to incorporate this lifestyle program of the Mind/Body Medical Institute into the overall demonstration. The same law provided a mandate for a 4 -year treatment period beginning November 2000. ■

01-239 Medicare Lifestyle Modification Program Demonstration - Mind/Body Medical Institute - South Bend

**Project Officer:** Armen Thoumaian

**Period:** August 2001-November 2004 **Awardee:** St. Joseph Regional Medical

Center

Funding: \$0

**Description:** The demonstration is being implemented at participating facilities licensed to provide the Cardiac Wellness Expanded Program of Dr. Herbert Benson and the Mind Body Medical Institute.

**Status:** In November 2000, the enrollment criteria were amended to include patients with less severe cardiovascular disease. In accordance with the

Consolidated Appropriations Act of 2001, steps have been completed to incorporate this lifestyle program of the Mind/Body Medical Institute into the overall demonstration. The same law provided a mandate for a 4-year treatment period beginning November 2000.

#### 00-053 Medicare Lifestyle Modification Program Demonstration Evaluation

**Project Officer:** Armen Thoumaian

Period: September 2000-August 2005
Awardee: Brandeis University, Heller

Graduate School, Institute for

Health Policy

**Funding:** \$1,995,144

**Description:** This project evaluates the health outcomes and cost effectiveness of the Medicare Lifestyle Modification Program Demonstration for Medicare beneficiaries with coronary artery disease (CAD). The demonstration tests the feasibility and cost effectiveness of providing payment for cardiovascular lifestyle modification program services to Medicare beneficiaries. The goal of the evaluation is to provide an assessment of the health benefit and costeffectiveness of treatment for Medicare beneficiaries with CAD who enroll in the 12-month cardiovascular lifestyle modification programs at the demonstration sites. The evaluation of the demonstration assesses the overall performance of the demonstration sites. including the quality of health care delivery over the course of the demonstration period. The evaluation also assesses the use of systems for administration, claims processing and payment, and the routine monitoring of quality of care.

Status: In September 2001, the evaluation was expanded to include a longer follow-up period of treatment and control patients and to include a critical review of literature. Preparations are being made to begin efforts to find Medicare beneficiaries that can be matched to those receiving treatment and followed as controls. We are awaiting final approval from the Office of Management and Budget for the beneficiary and provider survey instruments. The evaluation team has completed initial site visits and submitted a site visit report with recommendations.



### 99-136 Medicare Lifestyle Modification Program Demonstration Continuous Quality Monitoring

**Project Officer:** Mary Pratt

**Period:** July 1999-September 2003

**Awardee:** Delmarva Foundation for Medical

Care

**Funding:** \$639,215

**Description:** This project provides the quality monitoring for a four year payment demonstration designed to evaluate the feasibility and cost effectiveness of cardiovascular lifestyle modification. The demonstration is being implemented at participating sites licensed by the Dr. Dean Ornish Program for Reversing Heart Disease ®, and is being expanded to include facilities licensed to provide the Cardiac Wellness Expanded Program of Dr. Herbert Benson and the Mind Body Medical Institute. Sites under each model will be able to enroll up to 1800 Medicare Part B eligible beneficiaries who meet the clinical enrollment criteria and voluntarily elect to participate in the demonstration. This project provides continuous quality monitoring of the demonstration sites to help assure the health and safety of the participating Medicare patients.

Status: The period for the demonstrations began October 1999. In November 2000, the enrollment criteria were amended to include patients with less severe cardiovascular disease. In accordance with the Consolidated Appropriations Act of 2001, steps have been completed to incorporate the lifestyle program of the Mind/Body Medical Institute (into the demonstration. The same law provided a mandate for a 4-year treatment period beginning November 2000. Delmarva continues to provide the quality monitoring for the demonstrations, as modified. ■

#### **HEALTHY AGING**

The goal of the Healthy Aging project is to identify, test and disseminate evidence-based approaches to promote health and prevent functional decline in older adults. The project is synthesizing the evidence on how to improve the delivery of Medicare clinical preventive and screening benefits, and exploring how behavioral risk factor reduction interventions, such as smoking cessation, might be implemented in Medicare.

#### 98-276 Health Aging/Smoking Cessation

Project Officer: |ames Coan

**Period:** October 1998-September 2004

Awardee: RAND Corporation

**Funding:** \$200,000

**Description:** This demonstration will test smoking cessation as a Medicare benefit, based on RAND's Healthy Aging Project evidence report on smoking cessation and the Public Health Service clinical guideline on treating tobacco use and dependence. The demonstration will compare the impact of offering three different types of benefits for smoking cessation services on "quit" rates. The benefit options are: 1) reimbursement for provider counseling only; 2) reimbursement for provider counseling in addition to FDA-approved prescription or nicotine replacement therapy; and 3) telephone counseling quit-line and reimbursement for nicotine replacement therapy; and 4) usual care (smoking cessation information). States participating in the demonstration are Alabama, Florida, Missouri, Ohio, Oklahoma, Nebraska, and Wyoming.

Status: Legislation is required to add a smoking cessation benefit in Medicare. The Office of Management and Budget agreed to the waiver, which will permit these demonstrations to operate in January 2001. ■

#### 01-217 Healthy Aging/Smoking Cessation

Project Officer: |ames Coan

Period: August 2001-February 2002

Awardee: Olgivy, Seniors Research Group

**Funding:** \$253,275

**Description:** This demonstration tests potential interventions for smoking cessation that may be offered as a Medicare covered benefit to beneficiaries who smoke. The following variations in a smoking cessation benefit will be tested: 1) provider counseling reimbursement only, 2) provider counseling reimbursement with bupropion or nicotine replacement pharmacotherapy coverage, 3) "Quitline" and nicotine replacement pharmacotherapy coverage, and 4) usual care. The specific goals of the Medicare Stop Smoking Program are to evaluate the effectiveness, feasibility,



and cost of the smoking cessation benefit strategies in seven States and to make inferences that are generalizable to the Medicare program. The States participating in the demonstration are Alabama, Florida, Missouri, Nebraska, Ohio, Oklahoma, and Wyoming.

**Status:** The final report is being drafted. ■

### 01-219 Medicare Stop Smoking Program Continuing Medical Education Training

**Project Officer:** James Coan **Period:** September 2001-

Awardee: University of Wisconsin School

of Medicine, CTRI

**Funding:** \$280,956

**Description:** This project is a part of the Healthy Aging Project and is intended to identify effective interventions for smoking cessation that may be offered as a Medicare covered benefit to beneficiaries who smoke. The specific goals of the Medicare Stop Smoking Program are to evaluate the effectiveness, feasibility, and cost of three smoking cessation benefit strategies in seven States and to make inferences that are generalizable to the Medicare program. These strategies are: reimbursement for provider counseling, provider counseling plus bupropion or the nicotine transdermal patch, and a toll-free telephone counseling quitline. The States involved in the Medicare Stop Smoking Program are Alabama, Florida, Missouri, Nebraska, Ohio, Oklahoma, and Wyoming. The purpose of this contract is to develop a continuing medical education (CME) course for providers participating in the Medicare Stop Smoking Program, based on the Public Health Service clinical practice guideline on treating tobacco use and dependence. Continuing medical education credits will be awarded to providers (including physicians, physician assistants, nurse practitioners and certified nurse specialists) who complete the training. The training course will also address Medicare coverage and billing policies and procedures of the Medicare Stop Smoking Program.

**Status:** The "beta" copy of the continuing medical education training has been delivered. Final revisions are underway. ■

### 01-218 Healthy Aging/Smoking Cessation - Technical Assistance and "Quitline"

Project Officer: James Coan
Period: October 2001Awardee: Qualidigm, Inc.
Funding: \$2,700,956

**Description:** This contract supports the Healthy Aging Project's Medicare Stop Smoking Demonstration Project. The demonstration tests potential interventions for smoking cessation that may be offered as a Medicare covered benefit to beneficiaries who smoke. The specific purpose of this contract is to provide technical assistance for beneficiary enrollment, survey administration, data collection and the establishment of a smoking cessation Quitline. The demonstration tests the following variations in a smoking cessation benefit:

- 1) provider counseling reimbursement only,
- 2) provider counseling reimbursement with bupropion or nicotine replacement pharmacotherapy coverage,
- 3) Quitline and nicotine replacement pharmacotherapy coverage, and 4) usual care.

**Status:** The early stages of the project are underway. Protocols are being written and "Quitline" contractors are being sought. ■

#### 96-219 Outcomes Project

Project Officer: Benedicta Abel-Steinberg
Period: September 1996-April 2002

Awardee: RAND Corporation

**Funding:** \$2,146,988

Description: CMS contracts with Quality
Improvement (formerly Peer Review) Organizations
(QIOs) in each of the 50 States, and in the District of
Columbia, Puerto Rico, and the Virgin Islands. As part
of the QIO scope of work (SOW), QIOs are required to
implement projects including quality outcomes in six
clinical priority areas (acute myocardial infarction
(AMI), heart failure, diabetes, breast cancer,
pneumonia, and stroke or transient ischemic attack
(TIA). This project analyzes claims data at the State
level and enhances data with additional diagnosisspecific analyses and analyses of inpatient encounter



data from Medicare+Choice organizations, focusing on AMI, pneumonia, heart failure, and TIA. Additional contract activities include: Complication Screening Program (CSP) Analysis in Hospitals for two States (California and New York). Estimated complication rates for acute care hospital discharge data is provided in two ways: 1) using all secondary diagnoses on the discharge abstract in defining complications; and 2) using only diagnoses flagged as "not present at the time of admission" in defining complications. Complication rates are calculated for six patient subgroups called "risk pools": major surgery, minor surgery, invasive cardiology, endoscopy, medical, and all patients. Analysis will include looking at the effect on the complication rates of restricting the subset of hospitals to those with a minimum number of patients in a given risk pool. Additional analysis will compare the subset of hospitals identified as having high complication rates using the six risk pools listed above.

Status: The analyses are available at http://www.CMS.gov/quality. The reports will encompass national and State-specific data for each QIO to use in the tasks required in their sixth SOW. The paper on the use of claims data as a resource for quality monitoring is under review and revision. For the CSP, the paper describing the analysis including the methods and results sections is under review and revision, as is the development of hospital-level information. ■

00-120 Implementation of the Quality Improvement (formerly Peer Review) Organizations 6th Scope of Work Pneumococcal Pneumonia and Influenza Immunization Remeasurement Survey

**Project Officer:** Susan Arday

**Period:** September 2000-November 2002

Awardee: Abt Associates Funding: \$1,542,230

**Description:** The goal of this project is to assess the utilization of influenza and pneumococcal vaccines among Medicare beneficiaries, and to evaluate the vaccine promotion work performed by the Quality Improvement (formerly Peer Review) Organizations (QIO) under their Medicare sixth scope of work. The QIOs are charged to decrease morbidity and mortality

in six national clinical priority areas, one of which is pneumonia and influenza. This project specifically implements the Pneumococcal Pneumonia and Influenza Immunization Remeasurement Survey. The survey is administered to a sample of Medicare beneficiaries randomly, selected from each of 50 States plus the District of Columbia and Puerto Rico. It will also produce the attendant State-specific rates. Baseline rates for outpatient elderly Medicare beneficiaries' influenza and pneumococcal pneumonia immunizations have been obtained from the Centers for Disease Control and Prevention's (CDC) 1999 administration of the Behavioral Risk Factor Surveillance System (BRFSS). However, the BRFSS cannot be used for remeasurement due to mismatches between the OIO's timetable for evaluation and that of subsequent BRFSS survey administrations and data release from those administrations.

Status: There will be two separate, sequential rounds of data collection within this task order. The approximately 36 States' samples for the first round were drawn in early October 2000, and telematch procedures occurred shortly thereafter, ensuring that the contractor was in the field by mid-February 2001 and that all data collection and delivery for the first round was completed by May /June 2001. The 16 States' samples for the second round of the survey were drawn in October 2001, following the same procedures as performed in the first round, ensuring that all data collection and delivery for the second round States start -February 2002 and be completed by May/June 2002. ■

### 96-050 Influenza and Pneumococcal Analytic Reports

**Project Officer:** Lawrence LaVoie

Period: September 1996-January 2002
Awardee: CHD Research Associates

**Funding:** \$698,924

**Description:** This project develops a research database using CMS Medicare claims data to study the epidemiology of influenza (flu) and pneumococcal vaccination (PPV). One goal is to promote vaccinations by health-care providers, and to support coverage for Medicare beneficiaries. For example, Medicare claims records for PPV are extracted and merged to create a



beneficiary-level PPV research file used to generate annual and cumulative immunization rates. Using both the PPV file and flu immunization data file, a series of national and State-specific statistics are produced. Medicare utilization and enrollment data are linked with the PPV and flu files data to analyze immunization rates of high-risk beneficiaries.

Status: A PPV research file update with 2000 Medicare claims has been completed. National and State-specific statistics, based on analysis of 1999 Medicare claims, have been published in tables and reports and posted on CMS's Web site, http://www.CMS.gov/quality. ■

#### 01-220 Heart Failure Home Care

Project Officer: John Pilotte

**Period:** September 2001-September 2004 **Awardee:** University of Pittsburgh, Office of

Research

**Funding:** \$952,059

**Description:** This project seeks to use integrated nursing services and technology to implement daily monitoring of congestive heart failure patients in underserved populations in accordance with established clinical guidelines. Congestive heart failure disease management studies have typically focused on upper socioeconomic patients treated at academic medical centers or cardiology practices rather than underserved populations treated in community-based practices. This demonstration tests the clinical and economic effectiveness of the Alere Day Link Home Monitoring Device in Medicare beneficiaries from underserved population groups receiving care in community-based practices, who are diagnosed with congestive heart failure and have had a hospitalization within the last 6 months. The primary hypothesis is that the addition of this device to standard management of heart failure will reduce 6-month heart failure hospitalization rates, cardiovascular death, and decrease length of hospital stay for heart failure. There was a specific earmark in the 2001 (fiscal year) apropriations for this joint project between the University of Pittsburgh, Case Western Reserve in Cleveland, Ohio, and Mt. Sinai Hospital in Miami, Florida.

**Status:** This newly initiated project is in the startup phase. ■

00-122 Quality Resume (formerly "Development and Production of the Medicare Quality Monitoring System")

Project Officer: Benedicta Abel-Steinberg
Period: September 2000-January 2002
Awardee: Health Economics Research

**Funding:** \$1,173,065

**Description:** The Quality Resume (formerly called the "Development and Production of the Medicare Quality Monitoring System") tracks various aspects of the health status and health care of the Medicare beneficiaries using a combination of survey and administrative data. The primary goal of the Quality Resume is to collect, analyze, and interpret national and/or State-specific health data (both surveys and administrative data) on service utilization, health status and outcomes on morbidity and mortality relevant to CMS's Health Care Quality Improvement Project (HCQIP). The secondary goal is to disseminate the health and quality of care data/information to support quality of care improvement efforts and to promote HCQIP-related studies. Specifically, this effort produces two sets of data and information. The Quality Resume will provide the information essential for CMS to account for the effectiveness of the HCQIP efforts in changing the patterns of service utilization and in improving the health, morbidity and mortality of the Medicare beneficiaries. The Quality Resume is designed to fully address issues of disease-specific health status and outcomes of care at the State level, and are relevant to program improvement and accountability of the HCOIP HOCIP focuses on six clinical priority areas: AMI, breast cancer, diabetes, heart failure, pneumonia, and stroke, with the objective of reducing health disparities within the Medicare population.

**Status:** The Quality Resume project uses an Internal Technical Workgroup to assist the development and production of the system. Measures for service utilization, process and outcomes of care are finalized, and data specifications for the measures are under development. Conceptual framework for health status



is drafted. Extracting claims data (Parts A and B) and enrollment data (Denominator files) of calendar years 1992–1999 through the Decision Support Access Facility is underway. ■

### 98-232 Survey of Colorectal Cancer Screening Practices in Health Care Organization

Project Officer: Ann Meadow

Period: September 1998-July 2001
Awardee: National Cancer Institute

**Funding:** \$816,642

**Description:** The purpose of this project is to obtain current, nationally representative data on the physician and health system factors that may influence the use of screening and diagnostic follow-up for the early detection of colorectal cancer in community practice. Primary data collection will be supplemented by analysis of Medicare claims data from an independent sample of Medicare physicians.

Status: Separate surveys of primary care physicians, specialist physicians, and health plans were developed. Surveys were fielded in late 1999 and data collection was complete by April 2000. Response rates were 72 percent for primary care physicians, 83 percent for specialist physicians, and 52 percent for health plans. Data analysis is underway, and a paper on initial results from the survey of primary care physicians has been submitted for publication. ■

### 99-139 Study for Clinically Relevant Indicators for Pharmacologic Therapy

Project Officer: Barbara Fleming
Period: July 1998-April 2001
Awardee: Joint Commission on

Accreditation of Healthcare

**Funding:** \$442,028

**Description:** The Study of Clinically Relevant Indicators for Pharmacologic Therapy (SCRIPT) project is designed to build a consensus set of performance measures that will enhance the ability to identify problems and improve the quality of care associated with medication use. The goal is to develop standardized performance measures in the area of medication management, and to establish processes

and tools for monitoring and improving the care associated with medication use. The measures will be clearly defined so that they can be implemented both in managed care and fee-for-service settings and used by public and private sector pavers, purchasers and regulators for monitoring, evaluation, and quality improvement. The SCRIPT project is overseen by a Steering Committee made up of CMS, Agency for Health Research and Quality, the American Medical Association, American Association of Health Plans, National Committee on Quality Assurance, the American Pharmaceutical Association, two Peer Review Organizations and two science advisors. The project receives substantial input from a Coalition for Quality in Medication use comprised of more than 30 organizations representing consumers, purchasers, pharmacy and medical specialty societies.

Status: The Massachusetts Peer Review Organization () is leading the alpha and beta testing of the measures. The alpha testing phase to test the specifications of the measures and tools was completed in March 2001 and beta testing was completed in August 2001. A SCRIPT Steering Committee reviewed the results and analyses from beta testing in September 2001. A Coalition for Medication Use Meeting occurred in October 2001. We also expect that additional public and private organizations may contribute toward the costs of the SCRIPT project. ■

#### 99-123 Testing of the Diabetes Quality Improvement Project (DQIP) Abstraction Tool and Measure Specifications in Managed Care

**Project Officer:** Kathleen Winchester

Period: August 1999-

**Awardee:** Island Peer Review Organization

**Funding:** \$95,353

**Description:** This project is a Quality Improvement (formerly Peer Review) Organization special study. One objective was to validate the conversion of the MedQuest diabetes tool that was developed by Texas Medical Foundation for the Diabetes Quality Improvement Project (DQIP) using the specifications developed by National Council on Quality Assurance. Another objective was to test the paper tool in ten managed care organizations and report on the reliability and feasibility of the measures and the tool.



The project compares data derived using the DQIP medical record abstraction tool to data derived using the administrative data specifications in ten different managed care plans to determine the feasibility and validity of collection methodology. The project also compares use of medical record abstraction and administrative data in both managed care and fee-forservice.

Status: The MedQuest diabetes tool has been modified for use by managed care organization and fee-for-service providers for reporting Health Employer Data Information Set (HEDIS®) 2000 data for diabetes. In keeping with CMS's responsibility for accountability, there are still several important tests of these measures that need to be completed prior to use of the data for public reporting.

#### 01-171 Improving Nursing Home Enforcement

Project Officer: Elaine Lew

**Period:** September 2001-September 2002

**Awardee:** C.N.A. Corporation

**Funding:** \$400,000

**Description:** The goal of this project is to assess the effectiveness of nursing home enforcement by conducting a study on specific aspects of enforcement, assessing the overall effectiveness of the current system; and identifying policy issues and options for improvement.

**Status:** This newly initiated project is in the startup phase. ■

## 98-251 Measurement, Indicators, and Improvement of the Quality of Life in Nursing Homes

**Project Officer:** Mary Pratt

**Period:** June 1998-May 2002

Awardee: University of Minnesota, School

of Public Health, Institute for Health Services Research

**Funding:** \$2,766,715

**Description:** This project evaluates the impact of providing additional knowledge and educational tools on the improvement of quality of life for nursing home residents. It will focus on three topics: 1) measuring and developing indicators of quality of life; 2) developing quality improvement programs for nursing home quality of life; and 3) evaluating environmental design influences on quality of life. The 11 domains initially tested include: autonomy, dignity, individuality, privacy, enjoyment, meaningful activity, physical comfort, relationships, security, functional competence, and spiritual well-being.

Status: Data analysis is underway to examine the intertemporal and inter-rater reliability of the measures; test the transferability of the measures to nursing home personnel; and develop and test indicators of quality of life in nursing homes. In addition, the project is developing reliable ways to describe and classify features of the physical environment in nursing homes so as to study how physical environments affect quality of life.

### 00-175 Evaluation of Independent Informal Dispute Resolution Process (IDR)

**Project Officer:** Elaine Lew

**Period:** September 2000-September 2003

**Awardee:** Kathpal Technologies

**Funding:** \$973,052

**Description:** The project evaluates the effectiveness of the current and independent informal dispute resolution (IDR) process in order to ascertain whether revisions need to be made to Federal procedures as it relates to institutional long-term care. This project responds to a recommendation in a Congressional Appropriations Committee Report (fiscal year 2000) for CMS to initiate a pilot study using an independent entity to conduct the nursing home IDR process.

**Status:** Iowa and Texas are participating in CMS' independent IDR pilot study. For the duration of the study, these two States will replace their current IDR process with an IDR process conducted by an entity outside of the State survey agency. ■



## 99-121 National Resource Center on Home and Community Based Services - Quality Under Home and Community Based Waiver

**Project Officer:** Thomas Shenk

**Period:** September 1999-September 2002

Awardee: MEDSTAT Group Funding: \$3,463,070

**Description:** The purpose of this project is to develop and test the effectiveness of a National Consortium and Resource Center (NCRC) to improve access to consumer responsive home and community-based long-term care for people with disabilities of all ages. The long-range purpose of such a center would be to foster long-term care policies and practices that: 1) assist in "leveling the playing field" between institutional and community-based models of longterm care; 2) provide consumers with more control over choosing the setting in which they receive longterm care; 3) expand the range of high quality consumer responsive residential options, personal assistance, other home and community-based supports and health-related services available to people with significant mental and physical disabilities who wish to live in home and community-based settings; 4) promote parity and equity between the availability of institutional and home and community-based longterm care; 5) explore the potential for managed care organizations to utilize and expand consumer-directed home and community care; and 6) support financing and delivery approaches to consumer-responsive home and community-based services that enable States to manage and control their long-term care expenditures.

Status: During the 24-month development period, this project focused on exploring the effectiveness of a variety of national and State level strategies for supporting collaborative planning and problem solving among various stakeholders who influence the direction of long-term care policy reform (including Federal and State policy of officials, representatives of the aging and disability community, and providers). Several different approaches to equipping the various stakeholders with the information, tools, and technologies were needed to implement cost-effective systems of consumer-responsive home and community-based services. ■

99-070 Researching and Identifying the Most Effective Provider Education Efforts for Encouraging the Use of Medicare Preventive Services

**Project Officer:** William McQueeney

**Period:** September 1999-February 2001

Awardee: Abt Associates Funding: \$325,812

Description: This project involved the analysis and evaluation of current methods used by fiscal intermediaries and Medicare carriers to educate their provider communities on preventive services specified in the Balanced Budget Act of 1997. The project used focus groups with cross segments of Medicare providers to explore their information needs, including what information they needed from CMS, how such information is currently conveyed, and how such information can best be supplied in the future. In addition to the provider focus groups, the project used sub-focus groups to assess preventive health care needs among specific subpopulations that may be at high risk for illnesses related to the preventive services.

Status: Complete. ■

97-264 Research and Analytic Support for Implementing Performance Measurement in Fee-for-Service

Project Officer: Peggy Parks

**Period:** September 1997-April 2002 **Awardee:** Health Economics Research

**Funding:** \$1,151,985

**Description:** The goal of this project is to provide comparable information regarding performance in managed care and fee-for-service (FFS) programs. The project evaluated performance measurement at the national and small geographic area levels and practitioner-specific performance measurement at the group practice level. The small areas correlate with managed care market service-area definitions. Five small geographic areas were selected in Arizona, Georgia, Pennsylvania, Wisconsin, and Washington. Within those small geographic areas, four group



practices agreed to participate in this project as our study partners. The study partnerships assisted us in exploring the feasibility of producing these measures at the group practice level.

Status: The project is nearly completed. In 2002, reports on the Health Outcomes Survey in Medicare FFS and a comparison of it with the Health Outcomes Survey in managed care are due. A report on how responses to the survey can be biased was recently submitted. ■

#### 00-091 Patterns of Injury in Medicare and Medicaid Beneficiaries

Project Officer: Rosemarie Hakim

**Period:** September 2000-September 2001 **Awardee:** Brandeis University, Heller

Graduate School, Institute for

Health Policy

**Funding:** \$715,991

**Description:** This project was a descriptive study of the impact of injuries, including an analysis of specific types of injuries, on Medicare and Medicaid populations. The study examined the impact of injuries (unintentional and intentional) on health care costs, income, productivity, mortality and morbidity, especially among persons in vulnerable populations.

Status: An overview of injuries among elderly Medicare beneficiaries was done. Also completed are tables that describe the number and costs of injuries to Medicare elderly beneficiaries in total and broken down by age, gender, race/ethnicity, urban/rural status, region, long-term care status, and type of service. ■

### IM-200 Medicaid Quality of Care Linked Medical Records and Claims Data Study

Project Officer: M. Beth Benedict Funding: Intramural

**Description:** This study uses linked Medicaid claims and enrollment data with medical record abstracted data. It examines access, appropriateness, process of care and outcomes for children with acute asthma, non-

elderly women with hysterectomy and women with complicated deliveries and their newborns.

**Status:** Extensive analyses have been conducted on the pediatric asthma emergency room visits sample of Medicaid children. Further analyses are in progress. ■

#### IM-090 Potentially Avoidable Hospitalizations Among Medicaid Eligibles

**Project Officer:** M. Beth Benedict **Funding:** Intramural

**Description:** The purpose of this project is to examine nonelderly, adult female Medicaid beneficiary characteristics. This includes enrollment groups, demographics, utilization and expenditures. Select conditions include: 1) asthma, 2) emphysema, and 3) chronic obstructive lung disease.

**Status:** Descriptive analyses have been completed. Further analyses are underway. ■

#### 01-109 State Licensure and Certification Standards and Respiratory Therapy Competency Examinations

**Project Officer:** Tamara Syrek

Period: July 2001-March 2002
Awardee: Barents Group
Funding: \$278,491

Description: The purpose of this project is to examine whether the Medicare program should require competency exams or certification for those providing respiratory care in skilled nursing facilities. This project will study and identify variations in State licensure and certification standards for health care providers (including nursing and allied health professionals) and other individuals providing respiratory therapy in skilled nursing facilities. It is also to examine State requirements relating to respiratory therapy competency examinations for these providers and individuals.

**Status:** The project is approximately half way through and on target to receive the final report that will be submitted to Congress by March 2002. ■



### 01-110 The Impact of Alternative Low Vision Intervention on Quality

Project Officer: Joel Green

Period: August 2001-August 2003
Awardee: West Virginia Research
Corporation, West Virginia

University

**Funding:** \$558,867

**Description:** The purpose of this project is to test interventions and improve the quality of life for individuals with low vision, with a particular focus on the elderly. A regional center for vision rehabilitation services called the Appalachian Center for Visual Rehabilitation will be established to serve the low vision needs of a Statewide rural community, evaluate the effectiveness of its programs and export the beneficial ones to other rural areas across the country.

**Status:** The project was mandated by Congress (FY2001 Appropriations) and is in its developmental stage. ■

# 00-065 Clinical and Economic Effectiveness of a Technology-Driven Heart Failure Monitoring System

**Project Officer:** John Pilotte

**Period:** September 2000-September 2004 **Awardee:** University of Pennsylvania, Heart

Failure and Cardiac Transplant

Program

**Funding:** \$1,688,453

Description: This demonstration project assesses the impact of the Alere DayLink Heart Failure Monitoring System on the clinical outcome and economic effect among Medicare beneficiaries recently hospitalized for heart failure or acute exacerbation of previously existing heart failure. The project first looks at the addition of the Alere DayLink Heart Failure Monitoring System to standard management of heart failure medical care impact on re-hospitalizations for heart failure over six months. Second, the project will analyze the impact of the monitoring system on utilization of other Medicare services, Medicare costs, funcional status, processes of care, physician adherence to recommended clinical care guidelines, patient

adherence with prescribed therapy, social support and patient acceptance and satisfaction. Patients initially randomized to this technology will be re-randomized to either an additional six months of monitoring or to standard heart failure medical care with discontinuation of the Alere telemonitoring to assess the persistence of the intervention's effectiveness. Third, analysis will explore the impact of the extended six months of this monitoring system on re-hospitalization rates for heart failure, utilization of Medicare services, Medicare costs, patient adherence to the prescribed medical regimen and functional status.

**Status:** The selected demonstration sites are Billings Montana (rural), Louisville Kentucky (small metropolitan statistical area), and Philadelphia, Pennsylvania (major metropolitan statistical area). ■

### 00-045 Study of Intravenous Immune Globulin (IVIG) Administration Options

Project Officer: David Arday

Period: August 2000-March 2001

Awardee: Lewin Group Funding: \$434,092

**Description:** This project studied the extent to which intravenous immune globulin (IVIG) could be delivered and reimbursed by Medicare outside of a hospital or a physician's office. The Balanced Budget Refinement Act of 1999 specifically required the study address four areas: 1) alternate sites of service used by payers other than Medicare fee-for-service, 2) safety and health concerns associated with these alternate sites, 3) whether alternate sites would reduce costs, and 4) whether changing the site of service would reduce access to care.

**Status:** A Report to Congress on the findings and HHS recommendations was due in May 2001. ■

### 01-212 Improving Medication Safety in Outpatients

**Project Officer:** Dennis Nugent

**Period:** September 2001-September 2002 **Awardee:** Ohio State University Research

Foundation

**Funding:** \$691,000



**Description:** The object of this project is to identify strategies that will directly reduce the frequency of medication errors where patient compliance with medication instructions is critical, thereby improving the safety of medication use. This particular study will focus on the impact of packaging and/or distribution systems and patient education on compliance, treatment outcomes and frequency of adverse drug events. Sampled patients will be those with a diagnosis of hypertension getting prescriptions for lisinopril, and randomly assigned to a study or control group. The study groups' medications are packaged in "unit of use" with special instructions; the control group gets the standard package with the usual labeling. Compliance is measured by interview, pill counts, refill regularity and blood pressure. Morbidity (angina, myocardial infarction, stroke, renal impairment) and mortality will be measured. Medical service utilization (emergency department visits, hospitalizations) will be compared. Enrollment will occur for six months and each patient will be followed for six months.

**Status:** This continues earlier work of this awardee to explore adverse drug events in outpatients. ■

#### 99-053 Complaint Improvement Project (CIP)

**Project Officer:** Marvin Feuerberg

**Period:** September 1999-September 2001

Awardee: University of Wisconsin -

Madison/Center for Health systems Research and Analysis

**Funding:** \$269,651

Description: The main goal of the study was to identify steps CMS and States can take to strengthen the nursing home complaint investigation process and minimize abuse and neglect of residents. It assessed the effectiveness of these processes and made recommendations for specific actions to improve complaint investigations and to prevent abuse, neglect, and misappropriation of residents' property. As part of this effort, the project addressed how the process can be made more responsive to residents and their families. In addition, the study made recommendations about how to improve the ongoing monitoring and oversight of the complaint investigation process by CMS and the States. This project supports CMS efforts to improve the quality of nursing home care, prevent

abuse and neglect of residents, and ensure effective regulation, and addresses many of the issues identified by the Government Accounting Office (GAO) in its March 1999 Report ("Complaint Investigation Processes Often Inadequate To Protect Residents").

**Status:** The nature of the work involved in this project is such that additional time was needed to complete the tasks involved and integrate the information for a final report. For this reason, two no-cost extensions have been granted. ■

99-091 Geographic Variation in Rates of Cardiac Catheterization and Revascularization in Acute Myocardial Infarction: Results from the CMS Cooperative Cardiovascular Project

**Project Officer:** Craig Bagley **Period:** September 1999-

**Awardee:** Northeast Health Care Quality

Foundation

Funding: \$0

**Description:** This project is a follow-on to the Cardiac Catheterization Project (CCP) Geographic Variation study, "Results from the CMS Cooperative Cardiovascular Project."

**Status:** An article, entitled "Geographic Variation in Treatment of Acute Myocardial Infarction: Results From the CMS Cooperative Cardiovascular Project," was published. ■

### 99-093 Measuring and Improving Quality of Carotid Endarterectomy

**Project Officer:** Lindsey Bramwell **Period:** September 1999-

Awardee: Island Peer Review Organization

**Funding:** \$1,400,000

**Description:** The objectives of this study are: 1) to improve the quality of care and health outcomes for Medicare beneficiaries undergoing carotid endarterectomy (CEA); and 2) to support and extend the CEA grant awarded by the Agency for Health Care Policy and Research (AHCPR) to measure appropriateness of patient selection, specific surgical and medical processes of care, and risk-adjusted



perioperative outcomes. This project will extend the original scope of the AHCPR project by conducting quality improvement activities on a Statewide basis, and measuring the results of these activities.

Status: In progress. ■

99-090 Development and Internal Validation of a Multivariate Measure of Severity of Illness and Long Term Survival Following Hospitalization for Acute Myocardial Infarction

**Project Officer:** Craig Bagley **Period:** September 1999-

Awardee: Northeast Health Care Quality

Foundation

Funding: \$0

**Description:** This project is a followon to the Cardiac Catheterization Project (CCP) Geographic Variation study. This project will continue work to develop prior work as a journal article and to disseminate the findings.

**Status:** This special study, under a Peer Review Organization contract, continues to allow Dartmouth to work with the CCP data. This continued access to the data is being used to complete the activities related to the dissemination of these results through publication and presentation of the results at scientific meetings. ■

99-092 Evaluation of Ambulatory Care Quality Improvement Project (ACQIP) and Managed Care Quality Improvement Project (MCQIP) Data

**Project Officer:** Barbara Fleming **Period:** September 1999-

Awardee: Delmarva Foundation for Medical

Care

**Funding:** \$267,962

**Description:** This project further analyzes data collected in the Ambulatory Care Quality Improvement Project (ACQIP) and Managed Care Quality Improvement Project (MCQIP). The objective of this special study is to mine the very rich database that the three-State ACQIP project and the five-State MCQIP project provide above and beyond the value of the

pre-and post-intervention data within each State. These projects were designed to assist with obtaining answers to some key questions concerning measurement methodology and case mix. The MCQIP study involves five States (California, Florida, Minnesota, New York, and Pennsylvania) and 23 managed care plans in those States.



